

ABSTRACT

A method of manufacturing an article having controlled density, such as a decoupler for a vehicle interior trim component, is disclosed which uses an indexing, preferably rotary, apparatus. The method comprises the conveying of materials, preferably fibers, into an enclosure to form a preform having a shape of the enclosure, transferring the preform to a mold on an indexing apparatus where the preform is heated to a temperature such that adjacent fibers bond to one another upon cooling, and moving the mold to a press where the heated preform is molded into a predetermined three-dimensional decoupler configuration. The enclosure has a perforated portion and at least one panel movable relative to the enclosure so as to selectively expose portions of the perforated portion. The density of the preform may be varied as the at least one panel is removed to expose the perforated portion of the enclosure.